

## REMARKS

Claims 1-26 remain pending in this application. Claims 1, 8, and 12 have been amended to address the Examiner's objections. No new matter has been introduced by this amendment.

### **Rejections under 35 USC 101**

Claims 21-26 were rejected as being directed toward non-statutory subject matter. Claims 21-26 are directed toward a device having a graphics processing unit (GPU). The GPU performs certain functionality. The Examiner seems to be asserting that a GPU is non-statutory subject matter. A GPU is a mechanical device and is statutory subject matter. Furthermore, any GPU can process signals and a signal is not being claimed in claims 21-26. Applicants respectfully request that the Examiner specify where in claims 21-26 a computer readable medium is claimed as this terminology is never used as the GPU is claimed to have logic performing specific functionality. Accordingly, Applicants request that this rejection be removed for at least these reasons.

### **Rejections under 35 USC 102**

Claims 1-16 and 19-21 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 4,566,038 issued to Dimick, hereinafter referred to as "Dimick." Applicants respectfully traverse these rejections because the cited art does not teach or suggest each and every feature of the claims, as amended.

Claim 1, as amended, includes the features of identifying a compressed value to represent whether the corresponding single bit is one of the first single bit value and the second single bit value and how many identical single bits follow the corresponding single bit in the table, wherein a value representing an amount of identical single bits following the corresponding single bit is associated with multiple lines of the border image; and applying the compressed data from the table to a display of the main image in order to incorporate the border image with the main image on a display panel.

The Examiner asserts that Figures 3a and 3b illustrate border image data and main image data. Applicants respectfully disagree with this characterization as Dimick is directed toward a printed circuit board pattern and not a display. The pattern of Dimick is used for a laser writing beam to imprint the pattern on the

printed circuit board and does not require any display of the pattern (see column 1, lines 34-40). Furthermore, Dimick is directed toward a pattern for a printed circuit board and the amount of data required for this processing far exceeds the computing resources of a hand held device of the present application. However, irrespective of these differences, claim 1 specifies that the amount of single bits is associated with multiple lines of the image data. In contrast, Dimick is restricted to a line by line architecture. Dimick stores detailed data for each pattern in a pattern library and scan line image data, which identifies a pattern number, is stored on a line by line basis (see column 5, lines 1-10). The line by line format is necessary since the starting position of the pattern on the scan line is determined and then from the pattern library number, the details for the pattern are supplied, so that a laser can print the circuit (see column 5, line 20-40, and column 7, lines 18-65). Dimick cannot be modified as the beginning and end of each line must be designated due to the need to specify the laser position. Accordingly, claim 1 is not anticipated by Dimick for at least these reasons as claim 1 specifies that the value representing an amount of the identical single bits following the corresponding single bit is associated with multiple lines of the border image.

Claim 2 has been amended to specify that the border image surrounds the main image. Dimick is silent as to this feature and Applicants respectfully request that a printed circuit board would not have any contact pattern where a contact surrounds the entire circuit board. Claim 6 specifies the features of defining a compressed data structure to represent a block of successively repeated single bits in the table, the block associated with the multiple lines; storing the compressed data structure; and generating the table through decompression of the compressed data structure. As stated above, Dimick is incapable of having the block associated with multiple lines. In addition, claim 6 specifies that the compressed table is stored and then the table is generated from the compressed table. As stated in claim 6, the table is used to generate the main image with the border on a display panel entirely from the table. Dimick requires the use of the scan line by scan line data to identify a starting point of the contact and then must access the pattern of the contact from the pattern library. Dimick cannot generate an image from a single table. Accordingly, claims 2-7, which ultimately depend from claim 1, are allowable over the cited reference for at least the above stated reasons.

Claim 8 includes the feature of determining a compressed template layout wherein multiple table entries are combined into a byte of data having a most significant bit associated with one of the first single bit or the second single bit and wherein at least one of the multiple table entries includes data for multiple lines of the border image. As stated above with regard to claim 1, Dimick is incapable of performing this feature, i.e., wherein at least one of the multiple table entries includes data for multiple lines of the border image. Accordingly, claim 8 and dependent claims 9-13 are patentable over the cited reference for at least these reasons.

Claim 14 includes the features of wherein the number of single bit values represents data from multiple lines of the image. As discussed above, Dimick is incapable of performing this feature. Therefore Applicants respectfully request removal of this rejection for at least the above stated reasons. Claims 15-20 depend from claim 14 and are allowable for at least the above stated reasons.

Claim 21 includes the feature of wherein the quantity of the repeated single bits is associated with multiple lines of the border data. For at least the reasons provided above, claim 21 and dependent claims 22-26 are allowable over the cited references. Applicants would also like to point out that claim 23 has been amended to specify that the border and image data are generated in their entirety from the decompressed data. Dimick is incapable of performing this feature as the scan line data must first identify the starting position and then the pattern data is identified and accessed from a different table than the scan line data.

Applicants traverse the Examiner's assertion that Official notice is taken with regard to page 10 of the Office Action. Dimick requires a large amount of data and computing resources as compared to the capabilities offered through the portable computing devices of the present application. How would the Examiner handle the excessive storage requirements for the pattern data and scan line by scan line data on a portable device, as well as the ability to drive a laser? The Examiner provides no technical basis for enabling the storage of the large amount of data and the requirement for computing resources necessitated by the printed circuit design application, so that the hand held, battery-operated devices of the present application could accommodate the requirements of Dimick.

In view of the foregoing, Applicants respectfully submit that all of the pending claims are in condition for allowance. A notice of allowance is therefore respectfully requested. In the event a telephone conversation would expedite the prosecution of this application, the Examiner is respectfully invited to contact the applicant's attorney, Michael Gencarella (44,703) at 408-749-6900, ext. 6921.

Respectfully submitted,

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